



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

G. Vinson Hellwig, Chief  
Air Quality Division  
Michigan Department of Environmental Quality  
P.O. Box 30260  
Lansing, Michigan 48909

*Vince*  
Dear Mr. Hellwig:

I am pleased to transmit to you the final report of the New Source Review program evaluation that took place on August 4 and 5, 2009. Representatives of the U. S. Environmental Protection Agency met with Michigan Department of Environmental Quality (MDEQ) managers and staff as part of EPA's initiative to evaluate the State's New Source Review permit program implementation and to revisit issues that were noted in the first round of program evaluations on July 21-22, 2003.

EPA is pleased with MDEQ's performance in the air permitting program. We see that MDEQ's Air Permit Section is committed to working more closely with the regulated community, general public, and Tribal representatives to help maintain compliance with statutes that minimize adverse impacts on human health and the environment. We also believe that there is a stronger, more efficient coordination between MDEQ and Region 5. MDEQ has kept EPA well informed of individual construction permit issues and most general permit program implementation issues. Since the last program evaluation, MDEQ's Air Permit Section managers and EPA have held monthly calls. These up-front communications continue to foster positive working relations between your department and EPA, and have resulted in quality work products.

There are two remaining issues from the 2003 program evaluation that need to be addressed; MDEQ's application of the routine maintenance, repair and replacement provision, and the minor New Source Review State Implementation Plan updates. EPA has also identified two additional concerns through the 2009 program evaluation. Both concern MDEQ's documentation of permitting decisions. The issues related specifically to MDEQ's application of Best Available Control Technology for carbon monoxide, and MDEQ's application of the surrogate policy for particulate matter less than 10 microns in size.

If you or any of your staff have any questions or concerns about this report, please contact Rachel Rineheart, of my staff, at (312) 886-7017.

Sincerely,

A handwritten signature in dark ink, appearing to read "George T. Czerniak". The signature is stylized with a large, sweeping initial "G" and a long, horizontal stroke extending to the right.

George T. Czerniak  
Acting Director  
Air and Radiation Division

Enclosure

**Michigan New Source Review Program Review**

**Performed by USEPA Region 5  
August 4-5, 2009**

## **I. Executive Summary**

On August 4 and 5, 2009, the U.S. Environmental Protection Agency met with the Michigan Department of Environmental Quality (MDEQ) to perform an evaluation of MDEQ's New Source Review (NSR) Program. The purpose of the review was to revisit areas of concern noted in the August 4, 2005, NSR program evaluation report, to review permit issuance and the permitting process in Michigan, to review the status of the Prevention of Significant Deterioration (PSD) and nonattainment NSR State Implementation Plans (SIPs), and to assess the impact of several court decisions and federal program changes on the state program. The evaluation consisted of a discussion based on the Region 5 Questionnaire for NSR Program Evaluation. A discussion of EPA's findings and recommendations is included in Parts IV and V of the report.

MDEQ has satisfactorily addressed one of the three areas of concern identified in the initial program evaluation by increasing public access to information on previously issued permits. MDEQ's interpretation of the routine maintenance, repair, and replacement policy, and the State's minor source public notice requirements remain issues of concern.

MDEQ has taken positive steps to improve public access to information including the addition of web access to information on permitting actions taken since 2002 and the enhancement of its public participation process by providing access to public notice materials through the MDEQ website. While there are some limitations to the public's ability to provide comment electronically, MDEQ has taken steps to clearly identify those limitations so that the public may use other options for comment as appropriate.

MDEQ identified concerns with federal rule changes and with the accuracy of information on the RACT/BACT/LAER Clearinghouse during the discussion.

EPA is committed to working with MDEQ to ensure that development and implementation of its NSR program is in accordance with the Clean Air Act and implementing regulations.

## **II. Introduction**

In 2003, as part of its oversight role, EPA began a four year initiative to review the implementation of the NSR permit program by permitting authorities throughout the country. EPA conducted a review of the MDEQ's program on July 21-22, 2003<sup>1</sup>. A follow-up evaluation was conducted in Michigan on August 4-5, 2009. Region 5 developed the "Questionnaire for NSR Program Evaluation," which included a section to revisit areas of concern noted in the

---

<sup>1</sup> The report of EPA's findings can be found at <http://www.epa.gov/region5/air/permits/index.html> under permit correspondence.

previous evaluation as well as sections on program oversight, SIP status, state waivers and exemptions, and other factors affecting program implementation (i.e. court cases and rulemakings).

This final report summarizes the findings and conclusions of EPA from its review of the MDEQ NSR program. The findings and conclusions in the final report are based on the answers MDEQ gave to the questionnaire, our discussion of MDEQ's responses during the face-to-face meeting in August, and EPA staff knowledge of the program from experience with reviewing MDEQ permits and programs. This information was compared to the statutory and regulatory requirements for federal permitting programs.

### **III. Description of the MDEQ Program**

The Air Quality Division within MDEQ is responsible for issuing construction permits to ensure that all new or modified sources of air pollution will not have a detrimental impact on human health, human welfare, or the environment and will comply with all applicable state and federal requirements. The Natural Resources and Environmental Protection Act, Public Act 451 of 1994, as amended, Part 55 (Air Pollution Control) provides the statutory authority for the permitting program.

#### General/Minor Permitting Program

The generally applicable provisions of MDEQ's construction permitting program are contained in Part 2 of the Michigan Air Pollution Control Rules (Rule 336.1201 – Rule 336.1299). MDEQ requires a permit to install for any new or modified unit except as allowed in R 336.1278 to R 336.1290 which provide activities exempt from the requirement to obtain a permit. The Part 2 rules were approved into the Michigan SIP on May 6, 1980. MDEQ has submitted several revisions to the Part 2 rules; however, EPA has not taken a final action on any of these submittals.

#### PSD Permitting Program

In addition to the Part 2 requirements, new major sources and major modifications located in areas attaining the National Ambient Air Quality Standard must comply with the PSD requirements of Part 18 of the Michigan Air Pollution Control Rules. The full approval of the Part 18 rules became effective on May 24, 2010. A subsequent revision to the Michigan PSD SIP became effective on November 26, 2010.

## Non-attainment NSR Program

Michigan submitted Part 19 for approval into the Michigan SIP on March 24, 2009. Part 19 contains Michigan's current non-attainment NSR program; however, the current SIP approved non-attainment permitting program is the Part 2 rules approved on May 6, 1980.

## **IV. Findings**

EPA noted three areas for improvement in the first program evaluation.

1. **Synthetic Minor Tracking:** EPA noted a concern with a lack of a general list of synthetic minor permits that is accessible by the public. MDEQ has created two internal databases for tracking synthetic minor and opt-out permits, EVALFORM and PERMIT CARDS. MDEQ has also provided public access to all Permits to Install (PTI) issued since 2002 through its website, <http://www.deq.state.mi.us/aps/FinalConditions.shtml>. Users can sort data by company name, state registration number, or county and city, and a link to the final PTI is provided. MDEQ updates the information on this website on a weekly basis. While the website allows the public to view all final actions taken by MDEQ, there is not a way for the public to identify when MDEQ issued a synthetic minor permit without reviewing the permits in the website.
2. **Application of Routine Maintenance, Repair, and Replacement (RMRR) Exemption:** EPA noted a concern with MDEQ's application of the RMRR exemption, specifically with the evaluation of the frequency factor. It had been MDEQ's practice to consider the history of similar units at other facilities within the same industry, which is not consistent with EPA's policy. MDEQ has stated that it has not made any RMRR determinations since the last program evaluation and that it will follow EPA policy when making future determinations. Appropriate application of the RMRR exemption continues to be a concern within EPA generally, and EPA will continue to monitor application within MDEQ.
3. **Approvability of NSR Rules:** EPA proposed disapproval of the changes submitted prior to 1999, on November 19, 1999 (64 Fed. Reg. 61046). MDEQ provided comments on the proposed disapproval on January 24, 2000, and provided two additional revision packages in 2003 and 2009, and a letter dated May 15, 2012. EPA is currently reviewing these submittals.

Based upon the current evaluation, EPA has two additional concerns:

1. Carbon Monoxide (CO) Best Available Control Technology (BACT) limits: Several permits proposed and issued by MDEQ, including several PTIs for Detroit Edison Company and the Consumers Energy Company permit No. 390-08, do not include either an emission limitation for CO or an explanation for why technical or economic limitations on the application of a measurement methodology make imposition of an emission limitation infeasible. BACT is defined under the state's SIP approved rule at 336.2801(f) as an emission limitation, or, if the department determines that technological or economic limitations make an emission limitation infeasible, a work practice standard. It is EPA's position that BACT for CO, like any other criteria pollutant, must be expressed as an emission limitation or a work practice standard if an emission limitation is infeasible. When MDEQ finds that an emission limitation is infeasible, the supporting documentation for the action should clearly establish the basis for MDEQ's conclusion.
2. Particulate Matter<sub>10</sub> (PM<sub>10</sub>) Surrogate Policy: A permit application must acknowledge that Particulate Matter<sub>2.5</sub> (PM<sub>2.5</sub>) is subject to review, even if the applicant seeks to rely on the PM<sub>10</sub> Surrogate Policy to satisfy the applicable PM<sub>2.5</sub> requirements. If the applicant chooses to use PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub>, the permit record must contain an adequate rationale to support the use of the PM<sub>10</sub> surrogate approach for the specific project. Federal courts have held that a surrogate may be used only after it has been shown to be reasonable to do so. See, e.g., *Sierra Club v. EPA*, 353 F.3d 976, 982-984 (D.C. Cir. 2004); *Mossville Env't'l Action Now v. EPA*, 370 F.3d 1232, 1242-43 (D.C. Cir. 2004); *Bluewater Network v. EPA*, 370 F.3d 1, 18 (D.C. Cir. 2004). Further, the D.C. Circuit concluded that the PM<sub>10</sub> indicator was an arbitrary surrogate for the coarse fraction of PM<sub>10</sub> because it was "inherently confounded" by the presence of fine particulate matter (PM<sub>2.5</sub>), *ATA v. EPA*, 175 F.3d 1027, 1054 (D.C. Cir. 1999), but held in another case that the facts and circumstances in that instance provided a reasonable rationale for using PM<sub>10</sub> as a surrogate for the coarse fraction of PM<sub>10</sub>. *American Farm Bureau v. EPA*, 559 F.3d 512, 534-35 (D.C. Cir. 2009). Thus, the permit application should explain why PM<sub>10</sub> is a reasonable surrogate for PM<sub>2.5</sub> under the facts and circumstances of the specific project at issue and the applicant should not proceed with the general presumption that PM<sub>10</sub> is always a reasonable surrogate for PM<sub>2.5</sub>. In addition, in accordance with limits within EPA's PM<sub>10</sub> Surrogate Policy, the applicant should demonstrate why it is not technically feasible to complete a PM<sub>2.5</sub> analysis for the proposed project. In the absence of a showing that PM<sub>10</sub> is an adequate surrogate for PM<sub>2.5</sub>, and that a PM<sub>2.5</sub> analysis is not technically feasible, we recommend that the MDEQ require that sources satisfy the PM<sub>2.5</sub> requirements using PM<sub>2.5</sub> emissions and air quality data.

## **V. Recommendations**

1. Application of RMRR Exemption: MDEQ should ensure that it and facilities within the state are making RMRR determinations consistent with EPA RMRR policy.
2. Approvability of NSR Rules: MDEQ should continue to work with EPA to resolve issues related to minor source public notice requirements and the exemptions from the requirement to obtain a permit.
3. Documentation of Permit Decisions: MDEQ should ensure the supporting documentation for its permitting actions provide adequate detail demonstrating how the State's decision complies with the requirements of the Clean Air Act.
4. PM<sub>10</sub> Surrogate Policy: MDEQ should document its rationale for the use of PM<sub>10</sub> as a surrogate for PM<sub>2.5</sub> in the supporting documentation for individual permits.